

CLAIMS

What is claimed is:

1. A system for removing a contaminant layer from a surface of a semiconductor process component, the system comprising:
  - a. a receptacle receiving the component and a first volume of liquid, the liquid selected to remove the contaminant layer; and
  - b. at least one liquid-displacing element immersed in the liquid, the at least one liquid-displacing element displacing a second volume greater than half the first volume.
2. The system of claim 1, wherein the at least one liquid-displacing element includes a plurality of liquid-displacing elements.
3. The system of claim 2, wherein liquid-displacing elements moves freely within the liquid.
4. The system of claim 2, wherein the plurality of liquid-displacing elements are spherical.
5. The system of claim 2, wherein ones of the plurality of liquid-displacing elements are of different sizes.
6. The system of claim 2, wherein the displacement elements number at least one hundred.
7. The system of claim 1, wherein the component displaces a component volume less than the second volume.
8. The system of claim 2, wherein the at least one liquid-

displacing element defines a cavity receiving the component.

9. The system of claim 8, wherein the component is of a shape, and wherein the cavity matches the shape.
10. The system of claim 1, further comprising a support, wherein the component is suspended by the support.
11. The system of claim 10, wherein the support includes a pommel.
12. The system of claim 1, wherein the liquid is of a first density and the liquid-displacing element is of a second density is greater than the first density.
13. The system of claim 1, further comprising a cleaning bench receiving the receptacle.
14. The system of claim 13, wherein the cleaning bench includes a secondary containment vessel for the liquid.
15. The system of claim 13, wherein the receptacle is keyed to fit the cleaning bench.
16. The system of claim 13, further comprising a second receptacle.
17. The system of claim 13, wherein the receptacle includes a first inlet connector and the bench includes a second inlet connector mating with the first inlet connector, the first and second inlet connectors passing the liquid from the bench to the receptacle.

18. The system of claim 17, wherein removing the receptacle from the bench disconnects the first inlet connector from the second inlet connector.
19. The system of claim 17, wherein the receptacle includes a first drain connector and the bench includes a second drain connector mating with the first drain connector, the first and second drain connectors passing the liquid from the receptacle to the bench.
20. The system of claim 1, wherein the at least one liquid-displacing element is of a material that will not react with the liquid.